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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/564,978 01/18/2006		Toshiya Takagi	2006_0020A	5142	
513	7590 10/10/2006		EXAMINER		
	OTH, LIND & PONAC	GILLIAM, BA	GILLIAM, BARBARA LEE		
2033 K STRI SUITE 800	EEI N. W.	ART UNIT	PAPER NUMBER		
WASHINGTON, DC 20006-1021			1752		
			DATE MAILED: 10/10/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicat	on No.	Applicant(s)			
Office Action Summary		10/564,9	78	TAKAGI ET AL.			
		Examine	r	Art Unit			
		Barbara I	Gilliam	1752			
Period fo	The MAILING DATE of this communication	on appears on th	e cover sheet with the c	orrespondence address			
A SHO WHIC - Exter after - If NO - Failur Any r	ORTENED STATUTORY PERIOD FOR IS HEVER IS LONGER, FROM THE MAILI Issions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communical period for reply is specified above, the maximum statutory re to reply within the set or extended period for reply will, by eply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF T CFR 1.136(a). In no edition. I period will apply and ways statute, cause the ap	HIS COMMUNICATION  vent, however, may a reply be tim  vill expire SIX (6) MONTHS from  plication to become ABANDONEI	N.  lely filed the mailing date of this communicat (35 U.S.C. § 133).	·		
Status							
2a) <u></u> □	Responsive to communication(s) filed on This action is <b>FINAL</b> . 2b) Since this application is in condition for a closed in accordance with the practice un	This action is allowance excep	non-final. t for formal matters, pro		is		
Dispositi	on of Claims						
5)	Claim(s) 1-15 is/are pending in the application of the above claim(s) is/are with Claim(s) is/are allowed.  Claim(s) 1-15 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction on Papers  The specification is objected to by the Extended the specification is objected to by the oath or declaration is objected to be oath or declaration is objected to by the oath or declaration is objected to be oath or declaration is objected to be oath or declaration is objected to be oath or declaration.	and/or election of aminer.  accepted or both to the drawing(s) correction is required.	requirement.  Dio objected to by the Ended in abeyance. See red if the drawing(s) is objected in a compared in the drawing(s) is objected if the drawing(s) is objected if the drawing(s)	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121			
Priority under 35 U.S.C. § 119  12) △ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) △ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
2) D Notice 3) Inform	(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94 nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date 1/18/2006.	48)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te			

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### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### **Claims**

2. Claims 1-15 are pending.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3, 6-12, 14-15 are rejected under 35 U.S.C.102(b) as being clearly anticipated by BARZYNSKI et al. (US 4,555,471).
- a. The multilayer image-recording material of BARZYNSKI et al. clearly anticipates the presently claimed relief printing original plate. Specifically the multilayer image-recording material of BARZYNSKI et al. comprises a support, a photosensitive relief-forming layer and a mask-forming layer. The multilayer image recording material further comprises an intermediate layer present between the relief-forming layer and mask-forming layer and a top layer which meets the present limitations for the cap layer. The mask-forming layer is sensitive to heat radiation and contains a thermographic

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system which when irradiated with an IR laser having a wavelength greater than 1.00  $\mu$ m undergoes a decrease in absorption of actinic radiation in the wavelength range of from 300 to 420 nm (claims 1 and 3; col. 3, line 6 – col. 4, line 3). Preferably the thermochromic system in the mask-forming layer is together with a binder such as polyurethanes (col. 4, lines 16 – 29). After exposure to heat using an IR laser, the multilayer image-recording material is exposed completely, through the mask layer to actinic light having a wavelength of from 300 to 420 nm. Subsequently the mask-forming layer and the intermediate layer are removed and the relief image is then developed from the relief-forming layer (claim 5).

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- 5. Claims 1-2, 4-11, 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by VAN ZOEREN (US 5,506,086).
- a. The process taught by VAN ZOEREN is a process for making a flexographic printing plate from a photosensitive printing element wherein the photosensitive printing element comprises a support, an infrared-transparent photopolymerizable layer comprising an initiator having sensitivity to non-infrared actinic radiation, at least one layer of infrared sensitive material comprising an infrared radiation absorbing agent and at least one self-ablative binder and a material capture sheet (claim 1; col. 5, lines 16-40; col. 6, lines 15-65). Examples of the self-ablative binder include cellulosic materials. The infrared ablatable layer and material capture sheet are imagewise ablated with infrared laser radiation to form a mask which can be done using various types of lasers, preferably diode lasers emitting in the range of 780

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to 980 nm. The material capture sheet is removed and the photosensitive element is overall exposed to actinic radiation through the mask. Subsequently the element is developed (claim 1; col. 14, lines 13-35). In order for the infrared sensitive layer to be opaque to ultraviolet or visible radiation, the layer includes a radiation-opaque material which prevents the transmission of actinic light (col. 5, lines 40-64). The radiation-opaque material absorbs actinic light and therefore meets the present limitations for the ultraviolet absorber. The flexographic printing plate can comprise one or more barrier layers (col. 8, line 40 - col. 10, line 5) which meet the present limitations for the cap layer.

#### Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. In US 7,049,047 B2 (TENAGLIA et al.) and US 7,029,805 B2 (RAY et al.) teach thermally imageable elements comprising a masking layer and a substrate (abstract). The masking layer absorbs ultraviolet radiation and infrared radiation and comprises a radiation absorber.
- b. In US 6,451,505 B1 (PATEL et al.) and US 6,410,208 B1 (TENG) similar printing plates are taught.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-

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1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM -

5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax

phone number for the organization where this application or proceeding is assigned is

571-273-8300.

b. Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Doubara L. Qilliam Barbara I. Gilliam

Primary Examiner

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September 27, 2006